

WHAT IS CLAIMED IS:

1. A publish-subscribe system comprising:

a producer configured to publish a message and to subscribe to an acknowledgement that the message was received;

5 a consumer configured to subscribe to the message and to publish the acknowledgement; and

a network configured to register a message subscription and an acknowledgement subscription, to process the message subscription and the acknowledgement subscription, to forward the message to the consumer based on the message subscription and to forward the
10 acknowledgement to the producer based on the acknowledgement subscription.

2. The system of claim 1 wherein the producer includes a reliability mechanism to subscribe to the acknowledgement associated with a published message.

15 3. The system of claim 1 wherein the producer includes a timer and the producer republishes the message if a period of time expires before receiving the acknowledgement.

4. The system of claim 1 wherein the consumer includes a reliability mechanism to publish the acknowledgement.

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5. The system of claim 4, wherein the reliability mechanism removes duplicate messages.

6. The system of claim 1 wherein the network includes a content-based messaging
25 (CBM) router to route the message and the acknowledgement.

7. The system of claim 1, further comprising a reliability mechanism that uses a generic addressing scheme in identifying client devices.

30 8. The system of claim 7, wherein the generic addressing scheme provides a unique identity to the consumer and the producer.

9. A reliability application program interface (API) for reliable content-based messaging comprising instructions to cause a processor to:

- receive a message from a producer application;
- 5 register a subscription for an acknowledgement to the message;
- modify the message by adding at least one field to the message;
- forward the message to an interface to publish the message to a content-based message (CBM) network; and
- receive the acknowledgement from the interface.

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10. The API of claim 9 wherein the API includes instructions to cause a processor to implement a timer and republish the message if a period of time expires before receiving the acknowledgement.

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11. The API of claim 9 wherein the at least one field includes an identification field and a message type field.

12. The API of claim 9 wherein the at least one field includes a recipient field that identifies one or more receivers of the message.

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13. The API of claim 10 wherein the at least one field includes a sender field that identifies a sender of the message.

14. A reliability application program interface (API) for reliable content-based messaging comprising instructions to cause a processor to:

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- receive a message from an interface;
- modify the message by removing at least one field from the message;
- publish an acknowledgement to the message; and
- forward the message to a consumer application.

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15. The API of claim 14, wherein the API includes instructions to cause a processor to determine if the message has been previously received and to filter out the message if the message has previously been sent.

5 16. The API of claim 14, wherein the at least one field includes an identification field and a message type field.

17. The API of claim 14, wherein the at least one field includes a recipient field that identifies one or more receivers of the message.

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18. The API of claim 14, wherein the at least one field includes a sender field that identifies a sender of the message.

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